

This erratum is filed to be part of the public record.

Rule changes to part 15 to facilitate deployment of BPL will affect all part 15 devices.

Present BPL technology appears to be based on US patent number 5,982,276 granted in 1999. If the claims in this patent are of value then radio frequency emissions will be constrained by the power line magnetic field.

If either the claims in patent number 5,982,276 are valid or the company deploying this technology has implemented the technology correctly then BPL will not behave as a low power transmitter attached to an efficient long wire antenna with gain. Which has proven to be the case in tests in other countries.

Modeling two power lines 1000 to 2000 ft long in NEC (first written for Lawrence Livermore Labs in 1981) at right angles to each other show very little RF along the length of the power lines but appreciable amounts at the far end of the wire array and at right angle junctions. The 3db beamwidth is 10 degrees or less and the angle of radiation is on the order of plus 6 degrees at 20mhz. The gain produced by a wire array, like a power line, is greater than 13db over a dipole. At present I have seen no evidence that measurements to comply with Part 15 have been made at the ends of these long wire arrays in the plane of maximum radiation.

If changes are made to Part 15 rules to accommodate BPL then all part 15 devices will be allowed to produce as much forward power as practicable and measurements for emitted radiation will be made at side of the device's antenna, where emissions are minimal. Part 15 devices will then be allowed to produce hundreds of watts power to a well designed parabolic dish and still meet present requirements. To which I am opposed, as expressed in my original comment.